What Is Claimed Is:

1. A wavelength stabilizing method in which a first QCSE photodetector and a second QCSE photodetector receive a light outputted from a single light source, a first wavelength-photocurrent graph obtained when a selected bias voltage is applied to the first QCSE photodetector and a second wavelength-photocurrent graph obtained when a selected bias voltage is applied to the first QCSE photodetector are overlapped at a predetermined reference wavelength, a photocurrent outputted from the first QCSE photodetector is greater than a photocurrent outputted from the second QCSE photodetector at wavelengths shorter than the overlapped point while the photocurrent outputted from the second QCSE photodetector is greater than the photocurrent outputted from the first QCSE photodetector at wavelengths longer than the overlapped point, and if the photocurrent outputted from the first QCSE photodetector is greater than the photocurrent output from the second QCSE photodetector, output wavelengths are moved to the longer wavelengths side from the single light source, while if the photocurrent outputted from the second QCSE photodetector is greater than the photocurrent outputted from the first QCSE photodetector, the output wavelengths are moved to the shorter wavelengths side, thereby allowing the light outputted from the single light source to maintain the reference wavelength.

2. The method of claim 1, wherein the first wavelength-photocurrent graph and the second wavelength-photocurrent graph are obtained based on a peak of 1s exciton.

3. The method of claim 1, wherein the first QCSE photodetector and second QCSE photodetector are same from each other, but bias voltages respectively applied to the first QCSE photodetector and the second QCSE photodetector are different from each other.

4. The method of claim 1, wherein the single light source is a DFB LD or a DBR LD.

5. An optical power stabilizing method in which a first QCSE photodetector and a second QCSE photodetector receive a light outputted from a single light source, the method comprising the steps of:

comparing a sum of a first wavelength-photocurrent graph and a second wavelength-photocurrent graph with a predetermined reference value, the first wavelength-photocurrent graph being outputted from the first QCSE photodetector and the second wavelength-photocurrent graph being outputted from the second QCSE photodetector, respectively; and

when the sum is smaller than the predetermined reference value, outputting a light having an intensity greater than a

reference level while when the sum is greater than the predetermined reference value, outputting a light having an intensity smaller than the reference level, whereby an intensity of the light outputted from the single light source is maintained at a constant level.

6. A wavelength/optical power stabilizing system comprising:

a LD for outputting a laser beam;

a first QCSE photodetector and a second QCSE photodetector for receiving the laser beam outputted from the LD and a bias voltage from an outside to represent characteristics of a first wavelength-photocurrent graph and a second wavelength-photocurrent graph, the first wavelength-photocurrent graph and the second wavelength-photocurrent graph being overlapped at a predetermined reference wavelength, photocurrent values of the first wavelength-photocurrent graph greater being greater than those of the second wavelength-photocurrent graph at wavelengths shorter than the overlapped point while the photocurrent values of the second wavelength-photocurrent graph being greater than those of the first wavelength-photocurrent graph at wavelengths longer than the overlapped point;

a wavelength stabilizing comparator for comparing the photocurrent values respectively outputted from the first QCSE photodetector and the second QCSE photodetector, and outputting

a compared result;

a wavelength stabilizing temperature control part for receiving a signal outputted from the wavelength stabilizing comparator, and if the photocurrent value outputted from the first QCSE photodetector is different from the photocurrent value outputted by the second QCSE photodetector, changing the temperature of the LD such that the laser beam outputted from the LD has the reference wavelength;

an adder for outputting a signal value corresponding to a sum of the photocurrents respectively outputted from the first QCSE photodetector and the second QCSE photodetector;

a power stabilizing comparator for comparing the signal value outputted from the adder with a predetermined reference value to output a compared result; and

a power stabilizing driving control part for receiving a signal outputted from the power stabilizing comparator, and if the signal value outputted from the adder is different from the reference value, changing a driving current value of the LD such that an intensity of the laser beam outputted from the LD is changed, thereby stabilizing wavelength and intensity of the laser beam outputted from the LD.

7. The wavelength/optical power stabilizing system of claim 6, wherein the LD is a DFB LD.

8. The wavelength/optical power stabilizing system of claim 6, wherein the wavelength stabilizing temperature control part raises the temperature of the LD when the first QCSE photodetector outputs a photocurrent greater than the second QCSE photodetector while the wavelength stabilizing temperature control part drops the temperature of the LD when the second QCSE photodetector outputs a photocurrent greater than the first QCSE photodetector.

9. The wavelength/optical power stabilizing system of claim 6, wherein the first QCSE photodetector has a different beam absorption characteristic than the second QCSE photodetector, and the first QCSE photodetector and second QCSE photodetector are integratedly formed by a quantum well intermixing technology or a selective growth.

10. A wavelength/optical power stabilizing system comprising:

a DBR LD for outputting a laser beam;

a first QCSE photodetector and a second QCSE photodetector for receiving the laser beam outputted from the DBR LD and a bias voltage from an outside to represent characteristics of a first wavelength-photocurrent graph and a second wavelength-photocurrent graph, the first wavelength-photocurrent graph and the second wavelength-photocurrent graph being overlapped at a predetermined reference wavelength, photocurrent

values of the first wavelength-photocurrent graph being greater than those of the second wavelength-photocurrent graph at wavelengths shorter than the overlapped point while the photocurrent values of the second wavelength-photocurrent graph being greater than those of the first wavelength-photocurrent graph at wavelengths longer than the overlapped point;

a wavelength stabilizing comparator for comparing the photocurrent values respectively outputted from the first QCSE photodetector and the second QCSE photodetector, and outputting a comparing result;

a wavelength stabilizing current control part for receiving a signal outputted from the wavelength stabilizing comparator, and if the photocurrent value outputted from the first QCSE photodetector is different from the photocurrent value outputted by the second QCSE photodetector, changing a current applied to a DBR portion of the DBR LD such that the laser beam outputted from the DBR LD has the reference wavelength;

an adder for outputting a signal value corresponding to a sum of the photocurrents respectively outputted from the first QCSE photodetector and the second QCSE photodetector;

a power stabilizing comparator for comparing the signal value outputted from the adder with a predetermined reference value to output a compared result; and

a power stabilizing driving control part for receiving a signal outputted from the power stabilizing comparator, and if

the signal value outputted from the adder is different from the reference value, changing a driving current value of the DBR LD such that an intensity of the laser beam outputted from the DBR LD is changed, thereby stabilizing wavelength and intensity of the laser beam outputted from the DBR LD.

11. The wavelength/optical power stabilizing system of claim 10, wherein the first QCSE photodetector has a different beam absorption characteristic than the second QCSE photodetector, and the first QCSE photodetector and second QCSE photodetector are integratedly formed by a quantum well intermixing technology or a selective growth.

12. A wavelength/optical power stabilizing system comprising:

a wavelength control integration module including (i) an LD for outputting a laser beam, (ii) a light power splitter for dividing the laser beam outputted from the LD, and (iii) a first QCSE photodetector and second QCSE photodetector for receiving beams respectively outputted from the light power splitter and a rear terminal of the LD and a bias voltage from an outside to represent characteristics of a first wavelength-photocurrent graph and a second wavelength-photocurrent graph, the first wavelength-photocurrent graph and the second wavelength-photocurrent graph being overlapped at a predetermined

reference wavelength, photocurrent values of the first wavelength-photocurrent graph being greater than those of the second wavelength-photocurrent graph at wavelengths shorter than the overlapped point while the photocurrent values of the second wavelength-photocurrent graph being greater than those of the first wavelength-photocurrent graph at wavelengths longer than the overlapped point, the wavelength control integration module integrating the LD, the light power splitter, and a comparator;

a temperature control circuit and thermoelectric cooler for receiving a signal outputted from the comparator and maintaining a temperature of the wavelength control integration module at a constant value; and

an LD driver for receiving the signal outputted from the comparator, outputting a driving current to control a wavelength of the LD and inputting the driving current to the LD, thereby stabilizing wavelength and intensity of the laser beam outputted from the LD.

13. The wavelength/optical power stabilizing system of claim 12, wherein the LD is a DFB LD or a DBR LD.

14. The wavelength/optical power stabilizing system of claim 12, wherein the first QCSE photodetector has a different beam absorption characteristic than the second QCSE photodetector, and the first QCSE photodetector and second QCSE photodetector are

integratedly formed by a quantum well intermixing technology or a selective growth.